

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 21 July 2008 have been fully considered but they are not persuasive. An analysis of the arguments is provided below.

2. Applicant argues that a proxy server cannot be a client (Pp. 2-3). As one of ordinary skill in the art is aware, the terms client and server do not refer to any particular hardware structure but in the nature of its relationship and actions to other entities. In other words, a proxy server acts as a server when providing information to an end-user client, but it acts as a client to the server it is replacing. Otherwise, it could not act as a replacement; a proxy server has to request the information from somewhere.

3. Applicant then argues that the examiner does not clearly enough address certain issues (P. 4). The examiner has mapped the claims and discussed several limitations. It is the requirement of the examination process that the examiner provides an explanation of his interpretation, not that he should hold the applicant's hand. As for citing four columns of text, the examiner does so not to fool the applicant but to show the relevancy of an entire section. In addition, the applicant is reminded that the rejection is based on the art as a whole, and not limited solely to the cited sections. In other words, the applicant should bother himself to read those four arduous columns anyway.

4. In regards to the assertion that Ben-Shaul does not expressly disclose PNM, the examiner reminds the applicant that the 102 rejection is not fulfilled solely by the express use of a particular term but by the definitional and functional equivalent. A PNM is nothing more, as currently defined, than a mapping of URLs to form a pathway or navigation, i.e. a mapping necessary for redirection, DNS association, or URL interpretation where a query component forces a change in pathway navigation. The purpose of the citation of all four columns is to show that Ben-Shaul teaches all three suggested forms of PNMs. If this is too complex for the applicant, focus on any mention of the term URL mapping, as such mapping affects the pathway navigations.

5. In particular, the examiner notes that applicant uses PNM functionally as a URL mapping to facilitate redirections (specification, P. 10) and in controlling what parts of the page are downloaded (P. 11). At the very least, it must be recognized that Ben-Shaul teaches at least this definition (col. 8, line 60 - col. 9, line 55).

6. A similar argument is used in terms of the argument that Ben-Shaul does not expressly use the term annotation (Pp. 4-5). Here, the applicant fails to disclose any difference between annotating a URL and URL swapping. But even if there is a difference, the question is not whether Ben-Shaul uses the precise terminology but whether there is a functional equivalent. In any event, the URL is not merely replaced but is changed, usually by appending (annotating) the URL. "Query expansion follows the same behavior as other defined swaps, with the addition that, before forwarding the *modified URL request* to the origin server, the edge server *fills in* the

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request with the proper values for the requested parameters (emphasis added) (col. 40, lines 35-40)."

7. In response to applicant's argument that there is no suggestion to combine the references (Pp. 6-7), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the fact that they are interested in the same problem is considered motivation; there is no redundancy defense in Patent prosecution. Maslov teaches potential improvements on Ben-Shaul by showing how to solve the same problem in a potentially better way. For example, and as cited by the examiner in the actual arguments, Maslov improves the document retrieval process in cases where the files are moved (col. 3, lines 25-40).

8. As for the KSR analysis, the examiner does not rely on this argument as he fulfills the TSR requirements. But to show that it is obvious to try, it is clear that Ben-Shaul recognized the problem by applicant's assertion that Maslov is solving the same problem. There are only a finite number of ways to solve the problem, and Maslov shows that this particular solution will work.

9. Therefore, the rejection is maintained for the reasons above, and is final. Applicant may respond with a notice of appeal.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1, 3, 6, 8, 9, 11, 14, 16, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Ben-Shaul et al. (6,976,090).

12. For claims 1 and 9, Ben-Shaul teaches a method and system (abstract) for processing off-line interactive content (col. 1, line 1 – col. 20, line 65; col. 66, lines 15-20) in a dynamic system with variable addressability (Figs. 1-2), the method comprising the steps of:

- a. serving content for caching (col. 22, lines 15-50) in a client device (Fig. 3, #30; regional edge server in client relationship with origin and local servers);
- b. generating a pathway navigation map (PNM) for said served content (col. 7, lines 20 – col. 11, line 35; col. 21, lines 10-50; col. 41, lines 30-40); and
- c. annotating said served content (col. 23, line 50 – col. 24, line 50 and col. 33, lines 60-65 in view of CDML as defined) with endpoint directives (col. 39, line 55 – col. 40, line 55) for modifying hyperlink behavior referenced by said directives in said cached content (col. 21, lines 5-35).

13. Ben-Shaul does not actually use the term PNM, but it uses a functional equivalent based on the definition of PNM and its usage as currently claimed. In order to modify a page link for redirection or query service, the described maps associate the logical and physical connections

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between content locations and the servers they reside upon. In other words, the link modifier determines a pathway navigation using this mapping in order to figure out how to modify the link. Hence, the mapping is a pathway navigation map, as currently defined.

14. In the alternative, a definition for PNM is also the mapping that occurs in the DNS system, in that it clarifies not only the association between content and URL, but also defines which local server, if any, to access upon selection of a URL – that is, it defines the pathway to navigate in a map for web pages (col. 6, line 65 – col. 7, line 20; col. 50, lines 5-35; col. 52, lines 10-30).

15. For claims 3, 11, said annotating step comprises the step of annotating said content with at least one endpoint directive selected from the group consisting of take no action, remove all hyperlinks referenced by said directive, deactivate all hyperlinks referenced by said directive, point all hyperlinks referenced by said directive to a currently loaded page; and point all hyperlinks referenced by said directive to a parent page (col. 41, line 10 – col. 42, line 5).

16. For claims 6, 14, processing off-line submissions of content by navigating said PNM to reconcile on-line changes in hyperlinks in said content (col. 37, line 30 – col. 40, line 55).

17. For claims 8, 16, Ben-Shaul teaches a method and system (abstract) for processing off-line interactive content (col. 1, line 1 – col. 20, line 65; col. 66, lines 15-20) in a dynamic system with variable addressability (Figs. 1-2), the method comprising the steps of:

- a. receiving a request for an initial page of a Web application (Figs. 3-9);
- b. annotating said initial page (CDML; col. 23, line 50 – col. 24, line 50; col. 33, lines 60-65) with a set of hyperlinks referenced within said initial page (col. 39, line 55 – col. 42, line 5);

- c. retrieving additional pages associated with said set of hyperlinks and repeating said receiving, annotating and retrieving steps for all hyperlinks referenced within said additional pages (col. 20, line 65 – col. 35, line 10);
 - d. generating a pathway navigation map for said hyperlinks (col. 7, lines 20 – col. 11, line 35; col. 21, lines 10-50; col. 41, lines 30-40; see above); and
 - e. processing submitted content produced in an off-line interactive session with said initial page and said additional pages by reconciling hyperlinks in said submitted content by traversing said pathway navigation map (col. 21, lines 5-35).
15. For claim 17, Ben-Shaul teaches a system (abstract) for processing off-line interactive content (col. 1, line 1 – col. 20, line 65; col. 66, lines 15-20) in a dynamic system with variable addressability (Figs. 1-2) comprising:
- a. an off-line server process configured for coupling to an off-line client process across an occasionally connected network (Figs. 3-9);
 - b. Web application content defined by a plurality of documents (col. 20, line 65 – col. 35, line 10); and
 - c. an interactive content processor configured to serve content for caching by said client process (col. 41, line 10 – col. 42, line 5), to generate a pathway navigation map (PNM) for said served content (col. 7, lines 20 – col. 11, line 35; col. 21, lines 10-50; col. 41, lines 30-40; see above), and to annotate said served content (CDML; col. 23, line 50 – col. 24, line 50; col. 33, lines 60-65) with endpoint directives for modifying hyperlink behavior (col. 39, line 55 – col. 42, line 5) referenced by said directives in said cached content (col. 21, lines 5-35).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 2, 4, 5, 7, 10, 12, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Shaul as applied to claims 1, 3, 6, 9, 11 and 14 above, and further in view of Maslov (6,842,755).

18. For claims 2, 10, Ben-Shaul does not expressly disclose the best mode for developing a pathway navigation map. Maslov teaches a method and system (abstract) wherein said generating step comprises the steps of:

- a. forming a document tree having a plurality of nodes (col. 1, line 1 – col. 8, line 5; col. 10, lines 10-35);
- b. assigning each node of said tree to a document in said content accessible through a hyperlink referenced by a parent node (col. 8, line 5 – col. 10, line 10); and
- c. disposing within each node a set of hyperlink references to child pages in said content and a reference to a pathway to a root node of said document tree (col. 8, line 5 – col. 10, line 10).

19. At the time the invention was made, one of ordinary skill in the art would have added Maslov's document trees to Ben-Shaul in order to fulfill the goal of a linked document retrieval system (Ben-Shaul, col. 5, lines 1-40) wherein documents may be retrieved even as the location of documents shifts (Maslov, col. 3, lines 25-40).

20. In the alternative, one of ordinary skill in the art at the time the invention was made would have recognized the Maslov system as obvious to try in a Ben-Shaul system, with predictable results.

21. For claims 4, 12, Maslov teaches said annotating step comprises the step of annotating said served content with at least one endpoint directive to invoke an action modifying all hyperlinks referenced by said directive when a specified depth within said content has been reached (col. 8, line 5 – col. 10, line 10).

22. For claims 5, 13, Maslov teaches that said annotating step comprises the step of annotating said served content with at least one endpoint directive to invoke an action modifying all hyperlinks referenced by said directive when a specified depth within said content has been reached (col. 8, line 5 – col. 10, line 10).

23. For claims 7, 15, Maslov teaches that said processing step further comprises the step of utilizing a specific element of said hyperlinks to reconcile ambiguities generated by changes in hyperlinks in said content (col. 8, line 5 – col. 10, line 10).

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELVIN H. POLLACK whose telephone number is (571)272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. H. P./
Examiner, Art Unit 2445
17 October 2008

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2445